

*POLYGALA DUKEI* (POLYGALACEAE), A NEW SPECIES FROM PANAMA

*Polygala dukei* K. Barringer, sp. nov. TYPE: Panama, Darien: the Bolimina, small hill, *Duke & Brista 385* (US!).—Fig. 1.

Ab *P. scleroxylon* Ducke ramulis inermis foliis alternis bracteis glabris setas paucis subtentis differt.

Small tree with hard wood, white bark. Stems glabrous, without spines, with persistent leaf bases at the nodes. Leaves alternate, glabrous; petioles to 6 mm long, rugulose, drying darker than the blade; blade ovate-lanceolate, entire, subcoriaceous, shiny, 9–13 cm long, 4–7 cm wide, the base cuneate, the apex acuminate, the margin slightly revolute when dry, the midvein impressed above, prominent below, the secondary veins prominent on both surfaces, irregularly reticulate. Inflorescences axillary, racemose; axis 5 mm long; bracts glabrous, rigid, 1 mm long, subtended by a few stiff bristles. Flowers unknown.

Calyx deciduous. Capsule green, glabrous, loculicidal, 2-loculate, 1.5 cm long, 2.2 cm wide, conspicuously 2-lobed, the lobes ovoid, not winged; locules 1-seeded; seed smooth, glabrous, globose, pendulous, with an umbraculiform aril.

Additional Collection: PANAMA, DARIEN: near Estero Grande off Río Marea, 13 May 1967, *Duke 10965* (MO!).

Duke reports that the fruits are tasteless and odorless and are eaten by currasow, parrots, and parakeets.

The type is without flowers, but the fruits, habit, and leaf venation place it in *Polygala* section *Acanthocladus*. Chodat (1891, 1896) defined the section by its usually thorny stems, flowers in axillary fascicles, and stiff bracts. He keyed the section on the basis of its deciduous calyx, keeled petals, undivided stigma, and glabrous, un-

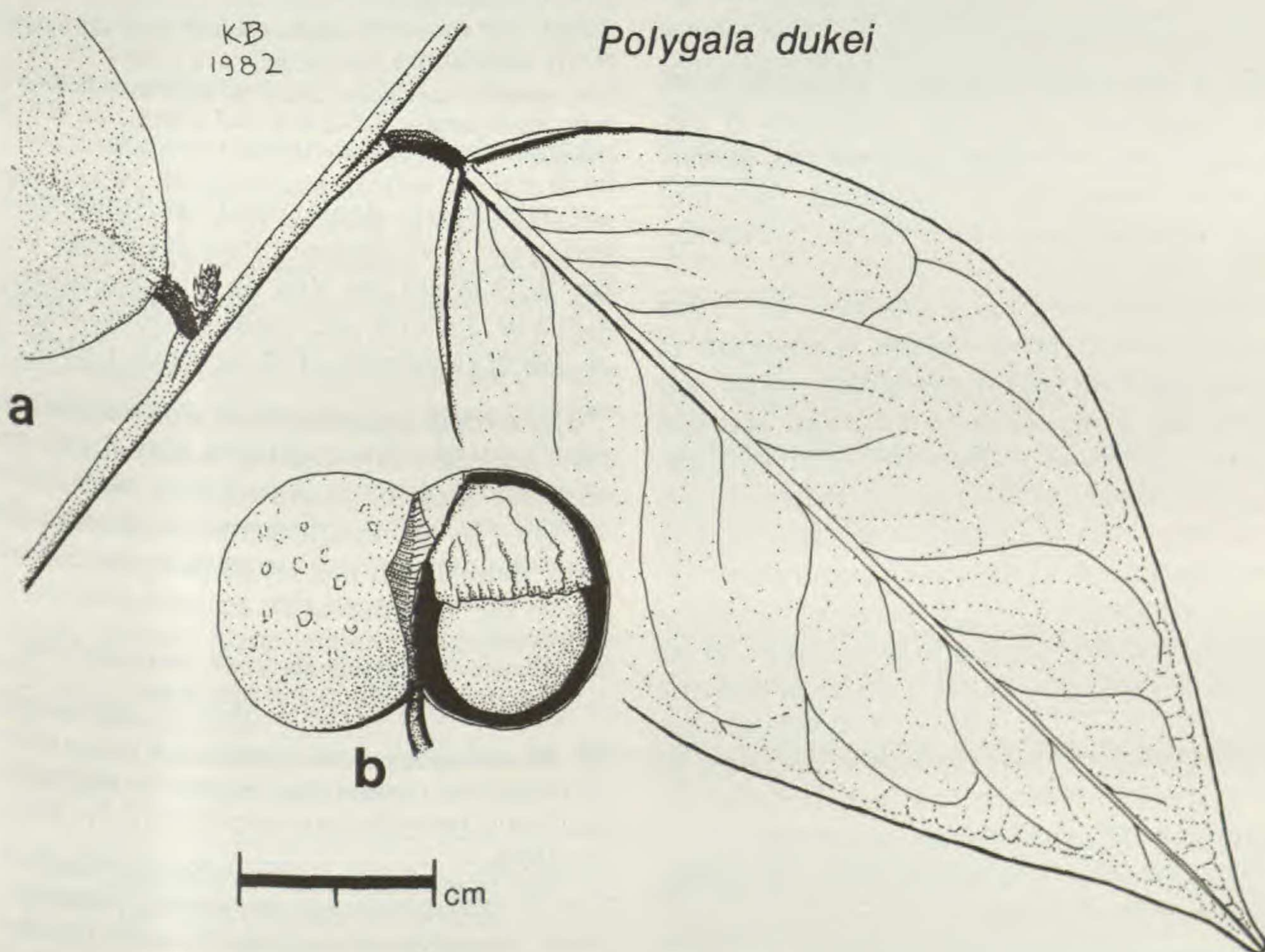


FIGURE 1. *Polygala dukei* K. Barringer. a. portion of branch with remnants of axillary inflorescence. b. fruit with part of valve removed to show aril and seed. Upper portion of scale indicates fruit size, lower portion indicates habit size, units equal 1 cm.



winged fruit. He described two species, *P. klotzschii* Chod. and *P. bennettii* Chod. [= *P. albicans* (Bennett) Grondona], both from Brazil. Later, two more Brazilian species were described, *P. pulcherrima* Kuhl. and *P. scleroxylon* Ducke. All four species are trees or shrubs with opposite leaves and persistent leaf bases. Short lateral branches often become spines after the leaves fall. The inflorescences are very short racemes, so that the flowers are fasciculate in leaf axils. The calyx is deciduous and the fruit is conspicuously 2-lobed, each lobe being ovoid and containing a single, pendulous, arillate seed. The leaves are subcoriaceous and have prominent looped secondary veins and irregularly reticulate tertiary veins. *Polygala dukei* shares all these characters except presence of spines and opposite leaves.

*Polygala dukei* can be easily distinguished from all other Panamanian species by its arborescent

habit, its fasciculate, axillary flowers, and its 2-lobed fruits (Lewis & Herrera-MacBryde 1969).

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## A NEW VARIETY OF *DECLIEUXIA CACUMINIS* (RUBIACEAE) FROM BAHIA

Among Raymond M. Harley's Rubiaceae from Bahia, Brazil, are numerous collections of *Declieuxia* H.B.K., of which there are two gatherings of *D. cacuminis*. This species has been previously reported from Minas Gerais (Kirkbride, 1976).

One of these collections, *Harley et al.* 21216 from the Serra Geral de Caitité, is referable to *D. cacuminis* var. *decurrens* Kirkb. which was known only from the type collection and two paratype collections, all from the vicinity of Grão Mogol (Kirkbride, 1976), approximately 350 air-kilometers south-southwest of the new station. In my discussion of the pubescence of var. *decurrens* (Kirkbride, 1976), it was described as less densely puberulous and with longer hairs on the mericarps than var. *cacuminis*. The pubescence of *Harley et al.* 21216 is denser with shorter hairs on the mericarps than the type collections. So the variation of pubescence in var. *decurrens* encompasses that found in var. *cacuminis*.

The other collection represents a new variety, which is presented here:

***Declieuxia cacuminis* Müller Argoviensis var. *glabra* Kirkbride, var. nov.**

Frutex omnino glaber, stipulis trilobis, decurrenti-

bus, corollis caeruleis, fructibus apicis incisura 0–0.4 mm, mericarpis 2.2–2.4 × 2–2.2 mm, ca. 0.6 mm crassis.

TYPUS: Brazil, Bahia, Serra das Almas, middle and upper N.E. slopes of Pico das Almas, ca. 25 km W.N.W. of the Vila do Rio de Contas, ca. 41°57'W, 13°33'S, alt. 1,600–1,850 m, *Harley et al.* 19691 (holotypus, UB; isotypus, CEPEC, K).

The overall appearance of this variety is ericoid, and therefore similar to that of var. *cacuminis*. It is easily separated from the other two varieties by its totally glabrous condition and other details that are set forth in the following key to the varieties of *D. cacuminis*:

- 1a. Shrubs completely glabrous; mericarps with the emargination 0–0.4 mm deep ..... *D. cacuminis* var. *glabra*
- 1b. Shrubs or subshrubs puberulous except the calyx and sometimes the corolla glabrous; mericarps with the emargination 0.5–1 mm deep.
  - 2a. Stipules unidentate or tridentate, not decurrent; corolla blue, externally sparsely puberulous; mericarps 2.2–2.6 × 1.6–1.8 mm, 0.7–0.9 mm thick ..... *D. cacuminis* var. *cacuminis*
  - 2b. Stipules unidentate, decurrent; corolla white, externally glabrous; mericarps 1.5–